

ABSTRACT

A camera A produces a 3D natural image B which is re-oriented and repositioned at N to predetermined parameters. Different processes C, D, E extract different features from the image to provide different processed images. The data space occupied by the processed images is reduced, for example by Principle Component Analysis, at F, G, H and the reduced processed images are combined at O to provide an image key I representative of the image B. The image key I is compared at J with stored image keys L of known images, and the output comparison is sorted at K to produce a final list M of potential matches. In a verification process, just a single image key L may be compared. The processed images at C, D, E may alternatively be combined prior to a single subspace reduction and/or optimisation method. 2D data may be combined with or used instead of the 3D data.